**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, D.C.**

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| In the Matter of | ) | |
| | ) | |
| Revision of the Commission's Rules | ) | CC Docket No. ~~94-102~~ 99-328 |
| To Ensure Compatibility with | ) | ~~RM-8143~~ |
| Enhanced 911 Emergency Calling Systems | ) | |

# REPLY COMMENTS OF NOKIA INC.

Nokia Inc. ("Nokia") hereby submits its response to comments filed in the above-captioned proceeding. Nokia believes strongly that the public interest lies with enabling handsets to facilitate consumer utilization of the digital capabilities of their multi-mode handsets to complete emergency calls. Doing so will promote the public interest and improve the rate of call completion, consistent with the Commission's goals expressed in the Second Report and Order.[1]

All but one commenting party supported Nokia's proposal, and as discussed below, this single party misconstrues both Nokia's proposal and operation of the standards used by the digital handset technologies. Integrating digital with analog call completion methods is essential for increasing numbers of consumers as multi-mode handsets quickly penetrate the market. These marketplace facts lend urgency to Nokia's request that the Bureau without delay exercise the flexibility to approve its request for an optional call completion method that will improve the rate of call completion for emergency wireless 911 calls.

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[1] *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems*, Second Report and Order, 14 FCC Rcd. 10954 (1999) ("Second Report and Order").

## BACKGROUND

In its *Second Report and Order* in Docket No. 94-102, the Commission adopted rules to facilitate completion of emergency 911 calls that apply only to analog handsets and multi-mode handsets when operating in analog mode. The Commission stated that its intent was not to limit the development and improvement of 911 call completion modes consistent with public interest principles and explicitly encouraged efforts to expand application of improved 911 calling methods to digital cellular and PCS services.[2]

On October 27, 1999, Nokia submitted the request for approval of the enhanced 911 call completion methodology for multi-mode phones that is the subject of this docket. AT&T Wireless Services, Inc. ("AT&T"), the Cellular Telecommunications Industry Association ("CTIA") and the National Emergency Number Association ("NENA") all filed in support of Nokia's request for approval of a method to use digital frequencies to attempt to reach a 911 operator for multimode (digital/analog) handsets. The Wireless Consumers Alliance, Inc. ("WCA") alone opposes Nokia's request. As discussed below, WCA's concerns are misplaced and, to a large extent, erroneous.

Nokia's request is for approval to use all modes that a handset is capable of using in a fashion that can be implemented quickly. Nokia realizes that it could fully comply with the call completion requirements in its multi-mode phones by implementing one of the approved call completion methodologies in just the analog modes of these phones. However, in our opinion, doing so would ignore capabilities in our handsets that can significantly increase the rate of call completion and thus enhance public

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[2] *Id.* at para. 90.

safety. Accordingly, we have proposed a readily-implementable method that would maximize the rate of 911 call completion and which could be made available to customers within months. Our proposal is not technology-specific because the same principles, if approved, could be applied to all three digital technologies. (We attached to our request specifics with regard to CDMA for illustrative purposes.) The Commission should approve Nokia's 911 call completion request without delay if it finds, as it must, that call completion would be improved by its implementation.

## APPROVAL OF NOKIA'S REQUEST WILL IMPROVE SUCCESSFUL COMPLETION OF 911 EMERGENCY CALLS

Alone among commenters, WCA opposes Nokia's request. It is readily apparent on the face of WCA's comments that WCA misunderstands several basic facts about both the Commission's rules and about the technical standards that guide wireless handset operation.

WCA mistakenly states that override of the negative SID list is a requirement of the standard, and therefore that Nokia's proposal is not "a new enhancement".[3] Nokia's explicit request is to utilize existing capabilities to further the public interest in better 911 call completions. Under the TIA/EIA 683-A standard referred to, the override is not a requirement, but rather, an option. We are asking to be permitted to implement this existing capability such that it will be automatically invoked whenever a 911 call is dialed. This will fully utilize the handsets' capabilities to complete 911 calls. Use of the override function might result in instances in which the Commission's analog 911 rules arguably could be violated technically, even though the underlying purposes of the rules

[3] *Comments of the Wireless Consumers Alliance, Inc. in Opposition to the Nokia Application* (Nov. 30, 1999) at p.3 and fn. 12.

would be furthered, because in some instances the handset could attempt to complete a call on a digital system after it has tried one, but not both, of the analog systems. This situation could violate the specific analog time requirements of the Commission's rules. This is the very nub of Nokia's request – to allow existing capabilities to be used that would help complete the 911 call without fear that the analog 911 rule would be interpreted as requiring the two analog systems to be tried in direct sequence, one after the other, even though a superior digital system may be available that could lead to a faster and superior connection.

We do not believe that the Commission in any way intended to impede using digital systems to complete 911 calls in this manner. This capability is an option in the TIA/EIA standard, not a requirement, and is beneficial because its use could result in a less-congested digital system being tried before the remaining analog system. The public interest therefore would be furthered by the Commission permitting use of these capabilities. The Commission did not mandate that handsets switch from digital to analog or *vice versa* when attempting to complete emergency 911 calls. We are simply trying to improve call completion chances by using the handsets' digital capabilities, which is what the Commission stated in its *Second Report and Order* that it would like to see.

In the same fashion, WCA misinterprets the plain meaning of Nokia's request. Whether a particular multi-mode handset provides analog capability with CDMA, TDMA, and / or GSM digital capabilities is irrelevant. Every multi-mode phone provides analog and one or more digital modes. It is difficult to understand how the plain meaning of

Nokia's request, as correctly quoted by WCA, could be misunderstood. Nokia "goes further to attempt completion of 911 calls on all systems *on which a handset is capable of operating* and all modes – both analog and digital." (Italics added by WCA).[4] Any handset can operate *only* on systems with which it is capable of operating. For the record, Nokia markets both dual-mode and tri-mode phones. For example, our model 6185 can operate on CDMA 1900, CDMA 800, and AMPs 800 systems. "Modes" refer to "standards", not "technologies". Obviously handsets cannot operate with technologies with which they are not capable.

WCA's statement is both irrelevant and incorrect that "[t]here is no place in the country where competing PCS systems use the same digital mode in the same service area."[5] It is irrelevant because we are trying to make sure that a multi-mode handset attempting to complete an emergency 911 call using both analog and digital capabilities is consistent with the letter, as well as the purpose, of the Commission's 911 rules. It is wrong because there already exist some competitors in overlapping or identical service areas that use the same technology,[6] and overlaps are increasingly common as the two cellular and up to seven PCS providers in the same geographic area construct their digital systems. There are a possible nine such providers, and currently only three different digital technologies being deployed in the United States.

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4 *Id.* at p.4.

5 *Id.* at p.4.

6 In Dallas, Texas, for example, both Sprint PCS and PrimeCo provide CDMA coverage.

The WCA also states that "[I]n fact, no additional systems can be accessed under the Nokia Proposal than are already being accessed today. . . ."[7] Since Nokia's proposal is to allow the use of current capabilities to maximize emergency 911 call completion, this is not inaccurate. But the point is that the Commission's new analog 911 rules could be interpreted to require that these capabilities not be used in order to ensure either that the two analog systems are tried in order (which cannot be ensured if the list is used) or that no analog system is tried. Clearly either result would be detrimental to the public interest and certainly not what the Commission intended when it adopted its analog 911 call completion rules.

The WCA also states that Nokia's proposal does nothing to combat "lock in." Again, this statement is untrue, and reflects a misunderstanding of our proposal and its application of existing standards. Under our proposal and as specified in the Commission's rules, feedback is continuously being provided to the user on the status of the call. In the digital mode, the call is deemed successful only if the handset successfully demodulates a digital traffic channel and receives first an acknowledgement order from the base station. Therefore, the fact that the base station is acknowledging further messages from the handset means that there is no "lock in" because a communication link has been established. In addition, as specified in our proposal, because the handset is now looking for all available systems, rather than just the two available analog systems, the chances of the "lock in" problem occurring are greatly reduced.

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[7] *Supra* note 3 at p.5.

Finally, WCA's emphasis that the Commission's rules apply only to analog cellular service is baffling.[8] The public interest is in getting emergency 911 calls completed as fast as possible, whether using 800 MHz cellular frequencies or 1900 MHz PCS frequencies. The Commission's rules as applied to multi-mode digital handsets that operate in both services require clarification. The Commission's stated objectives will be furthered by eliminating any doubt as to how the rules may be interpreted and applied to multi-mode handsets.

## THE BENEFITS OF THE NOKIA PROPOSAL OUTWEIGH ANY BENEFIT OF STRICTLY APPLYING AN ANALOG RULE TO MULTI-MODE DIGITAL/ANALOG HANDSETS

WCA states that the Nokia proposal would result in exceeding the maximum allowable time to deliver a call to the landline carrier and fails to guard against the "lock-in" problem. In making these arguments, WCA completely ignores the seconds and minutes that could be saved in completing a 911 call if the less crowded and more available digital frequencies can be used. There appear to be three ways to ensure compliance with the Commission's analog rules: (1) bar digitally-subscribed handsets from ever trying the analog mode when 911 is dialed; (2) bar the handset from trying any of the digital modes when 911 is dialed; or (3) ensure that attempts on the two analog systems are made consecutively. The first two are totally unacceptable because in specific situations the handset might not be able to complete the call, *i.e.*, where only analog (1) or only digital (2) systems are available. We see no public interest benefit to either option, although both would result in technical compliance with the Commission's rules. The third option could delay call completion substantially when, for example,

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[8] *Id.* at p.6.

trying an available digital system after the first analog system would result in a completed call, but the signal of the second analog system is too weak to do so.

Finally, WCA accuses Nokia of attempting to avoid compliance with the Commission's 911 call completion rules. Nothing could be further from the truth. As a plain reading of our proposal shows, Nokia is seeking to go beyond minimal compliance with the analog call completion rules by using the existing capabilities in our multi-mode handsets to extend call completion to the handsets' digital modes.

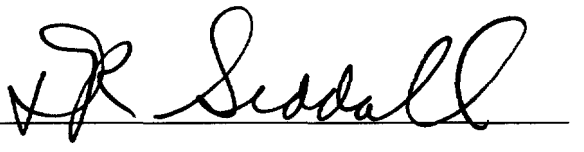
## CONCLUSION

For the reasons stated above, Nokia respectfully requests that the Commission grant its request to enable both the analog and the digital capabilities of multi-mode handsets when 911 calls are made. Doing so will ensure the most rapid roll-out of technology in a manner that serves the public interest.

The Commission should not impede consumers from realizing the benefits of digital technology. In an emergency, the American public should not be deprived of capabilities that already exist to communicate through 911. The Commission certainly does not have any such intent, and Nokia not only does not, but wishes to ensure that

every call completion possibility is tried in the most feasible fashion so that the public will derive the maximum benefit from its equipment.

Nokia Inc.

By: 

Leo R. Fitzsimon, Esq.
Director of Regulatory
and Industry Affairs
Nokia, Inc.
1110 Connecticut Ave., N.W.
Suite 910
Washington, D.C. 20036
(202) 887-5330

David R. Siddall, Esq.
VERNER, LIIPFERT, BERNHARD,
McPHERSON and HAND, CHARTERED
901 15th Street, N.W. Suite 700
Washington, D.C. 20005
(202) 371-6000
Its Attorney

Date: December 10, 1999

## CERTIFICATE OF SERVICE

The undersigned hereby certifies that, on this 10th day of December, 1999, I caused copies of the foregoing document to be served by first-class U.S. mail to the following:

Chairman William E. Kennard
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Commissioner Susan Ness
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Commissioner Harold Furchtgott-Roth
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Commissioner Michael K. Powell
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Commissioner Gloria Tristani
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Mr. Thomas Sugrue, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Ms. Kris Monteith
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Ms. Nancy Boocker
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Mr. Daniel Grosh
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Mr. Marty Liebman
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Mr. Carl Hilliard
Wireless Consumers Alliance, Inc.
1246 Stratford Court
Del Mar, CA 92014

Mr. Douglas I. Brandon
Vice President - External Affairs
AT&T Wireless Services, Inc.
1150 Connecticut Avenue, N.W.
Washington, DC 20036

Mr. W. Mark Adams
Executive Director
National Emergency Number Association
Post Office Box 36096
Columbus, OH 43236

Mr. Michael F. Altschul
Vice President, General Counsel
Cellular Telecommunications
Industry Association
1250 Connecticut Avenue, N.W.
Suite 800
Washington, DC 20036

Vance W. Schuemann